

OBSTETRICS

UNDER THE CHARGE OF

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The Cause of Rupture in Tubal Pregnancy.—KIUTSI (*Archiv f. Gynäk.*, 1911, Band xciv, Heft 2,) gives the results of his extensive study of this question in Veit's clinic in Halle. His paper is fully illustrated. He characterizes such rupture as acute bursting of the capsule of the embryo. Examination of specimens show various changes in the villi, extravasation of blood, engorged veins, infiltration of blood in the connective tissue, and symptoms of engorgement. The cause he finds to be the occlusion of veins in the intervillous spaces by the growth of the villi. The arterials bring the blood into these spaces, but the pressure of the villi prevents its return by the veins. This process gradually produces a thinning in the capsule of the embryo. The edges of the opening are not usually covered by fetal cells. The trophoblast does not extend to the edge of the ruptured tissue. If fetal cells rupture the capsule they must always penetrate the maternal tissue, and in such a case would even attack the peritoneum. A growth of the villi may be described as apoplexy of the villi, as ischemia of the villi, or as a combination of the two. If the tissues are greatly compressed the apoplectic portion is usually on the periphery at the summit of the villus. The fetal erythroblasts often take the form of free nuclei. These specimens also show in the neighborhood of the principal rupture of the capsule, the giving way of intracapsular tissue by congestion, and extravasation of blood in the connective tissue. The inner layers of the capsule undergo retrogressive changes. The hemorrhage which threatens the patient's life occurs when rupture of the tissues opens the small arteries; also when the tissues surrounding these vessels are comparatively thin, and no efficient stoppage of the hemorrhage from pressure develops. The death of the embryo results from the disturbance of circulation in the villi, and is of secondary consequence to the intervillous congestion. In general, the bursting of the pregnant tube results from abnormal growth of villi, dilatation of veins, and intervillous extravasation of blood. Mechanical violence or contraction or torsion of the tube favor this. Undoubtedly previous inflammation predisposes to this accident. Observation shows that the ovum can develop in the tube without the presence of mucous membrane.

The Prevention of the Formation of Striae of Pregnancy.—Those patients who object to the formation of the characteristic striae of pregnancy, and consider them a deformity, may find comfort in BARFURTH's success in the clinic at Rostock, in preventing this change by massage (*Zentralbl. f. Gynäk.*, 1911, No. 51). Barfurth reports 12 cases in which massage was given by student midwives. Those portions of the abdomen where striae most often develop were treated by

stroking motions, pressure being gently exercised upon the tissue held between the thumb and finger. The abdominal skin was massaged in circular and radial motions from the umbilicus, and the tissues of the breast were similarly treated. The thighs and hips were massaged in various directions. Oil was used before the massage. In most cases daily massage of fifteen to thirty minutes sufficed, but where the skin was excessively resisting the patient received two treatments daily. Occasionally manipulation was so painful that it was abandoned. The patient improved if the skin became softer and more distensible. In the great majority of cases the treatment was agreeable to the patient.

Medical Education and the Midwife Problem in the United States.
—WILLIAMS (*Jour. Amer. Med. Assoc.*, January 6, 1912) sent a list of questions to the professors of obstetrics, in 120 medical schools, giving the full four-year course; 43 replied. When these replies are analyzed, they indicate that many professors are inadequately prepared for their duties, and have but little conception of the obligations of a professorship; that a considerable proportion are not competent to cope with all obstetrical emergencies; that nearly all complain that their teaching and hospital equipment are inadequate for the proper training of students; and a large proportion admit that the average practitioner through his lack of preparation for the practice of obstetrics may do his patient as much harm as the much maligned midwife. As regards what is needed to make the equipment of American medical schools competent for obstetrical training, it was found that this department was unusually inferior to others in ward accommodations, intelligent and educated assistants, and especially in broad-minded scientifically trained teachers, and properly equipped laboratories for investigating work. It is not surprising from this fact to find that one-fourth of the entire number of teachers who replied stated that they did not consider the ordinary graduate from their schools competent to practice obstetrics; while others considered the medical graduate as a fairly efficient man midwife. Williams states that in his own experience students are unfit on graduation to practise obstetrics in its broad sense, and are scarcely prepared to handle normal cases. As regards the attendance in labor cases by midwives, it is found that very few practise in Montreal and but a small number in Boston. In the greater number of large American cities they conduct from 40 to 60 per cent. of all labor cases. There is no efficient and satisfactory control of these midwives in any portion of the country. More than one-half of the teachers replying consider that general practitioners lose proportionately as many women from puerperal infection as do midwives. When the question is raised as to how this bad result is obtained, the majority believe that ill-judged and improperly performed operations, in the hands of the general practitioner, cause as many deaths as result from the mistakes of incompetent midwives. When the question of improving these conditions is raised, general improvement in medical education is a fundamental necessity. Obstetric professors must be especially trained for this work, and devote themselves largely to the care of hospital patients, the proper training of assistants and students, and the advancement of knowledge. Medical

faculties and hospitals must recognize that obstetrics is a fundamental branch of medicine, requiring a scientifically trained man as a teacher, with a broad grasp of the subject. The general practitioner must realize that he is competent to conduct only normal cases of labor, and that major obstetrics, as major surgery, should be undertaken only by especially trained men, in control of abundant hospital facilities. Applicants for license to practise should submit a statement certifying that they have seen, delivered, and personally examined, under appropriate clinical conditions, at least ten women. The public must understand that poorly trained doctors are dangerous, that most of the disorders of women result from poor obstetrics, and that poor women, in fairly well-conducted free hospitals usually receive better care than well-to-do women in their own homes; and that competent obstetricians will be forthcoming so soon as the public is willing to recognize them as such. Obstetric charities must be increased by free hospitals and out-patient service for the poor, and proper hospital accommodations for those in moderate circumstances. Visiting obstetric nurses and helpers trained to work under them, can be of service. Midwives should be gradually abolished in large cities and replaced by obstetric charities. The reviewer gladly contributed replies to the questions sent and considers the investigation most timely. He further thinks that a considerable responsibility lies upon teachers of obstetrics in the conception which they give to medical students concerning this branch of medicine. While the fundamental facts of obstetric surgery should be taught to all graduates, it is the duty of the obstetric teacher to warn the entire class that but a small proportion of them will become competent obstetric surgeons. These only should undertake difficult forceps extraction, version, placenta prævia, eclampsia, craniotomy, opening the pubic girdle, Cesarean section, ectopic gestation, separation of the placenta, and ruptured uterus. The majority of a graduating class should early determine whether or not they propose to do surgery, obstetric or other, and unless they find themselves with unusual ability and equipment they should decline obstetric surgery. Normal parturition without complications comes within the scope of the average graduate and practitioner, provided he is not in a position to infect his patient. Medical graduates and general practitioners sometimes allege that obstetrics belong to general practice. By some who cater to the general profession for consultations, obstetrics has been termed the specialty of the general practitioner. If successful general practitioners are asked whether they do obstetric work from choice or from necessity, in my experience they invariably reply that they do it only to keep the medical practice of the family. If they could do so, they would be quite willing to turn all prolonged and complicated cases of parturition over to a competent obstetrician, who in return would not interfere with the medical practice of the family. Unless one is able and equipped to do obstetric work it does not pay, and by the demands upon the time and strength of the obstetrician, it interferes most seriously with general medical work. Furthermore, the physician who must treat the exanthematous diseases of childhood, and the various contagious diseases, is not a safe or suitable person to conduct confinements. Radical improvement in this direction will not become general until the economic side

of the problem is demonstrated. When a man learns that in the long run it will cost him less to have his wife receive proper attention in labor, avoiding serious lacerations, and promptly repairing those which are inevitable, he will be willing to pay a fair price for such service. It is cheaper than a badly conducted confinement at a cheap rate and the expense of a secondary operation by a surgeon or gynecologist later. The saving of infant life through competent obstetric work does not always appeal to those who must struggle to make a living. This is, however, a question of national importance, and in other countries has received the careful attention of governments and philanthropists.

GYNECOLOGY

UNDER THE CHARGE OF

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Vaginal Hysterectomy Under Local Anesthesia.—RUGE (*Zentralbl. f. Gynce.*, 1912, xxxvi, 561) believes that, while ordinary infiltration anesthesia has a great field of usefulness in gynecology as in other branches of surgery, that produced by blocking the nerve-trunks at a distance from the field of operation is preferable, since the appearance and consistency of the tissue in which the operation is to be performed is not altered. He has devised the following technique for the performance of complete vaginal hysterectomy, and other major vaginal operations. After disinfecting the vagina the long, thin needle of a "Record" syringe is introduced into the parametrial tissue to one side of the cervix to a depth of 4 to 5 cm., being directed in a somewhat lateral direction, in order to strike the nerve trunks before they have undergone their ultimate subdivisions. If the needle is introduced slowly, most vessels, and any coils of intestine with which it may come in contact, will be pushed aside and not injured. Should a vein be punctured, however, blood will begin to flow out of the needle, which must then be drawn back a little, and advanced in a slightly different direction. When the needle has been satisfactorily introduced the 10 c.c. syringe is attached, and, gradually withdrawing the needle, the solution injected. The process is repeated on the opposite side; then at two points in the anterior and two in the posterior vaginal vault similar injections of 3 to 5 cc. of fluid are made. In the anterior vaginal vault it is necessary to introduce the needle 2 to 3 cm. deep, but in the posterior only just through the mucosa. As injection fluid Ruge uses a 1 per cent. novocain solution, to each 100 c.c. of which 5 drops of a 1 to 1000 adrenalin solution are added. It is sterilized by boiling immediately before use. The amount used is about 40 c.c., but it is practically non-toxic, and much larger amounts could be employed with impunity. The vagina is rendered anesthetic by